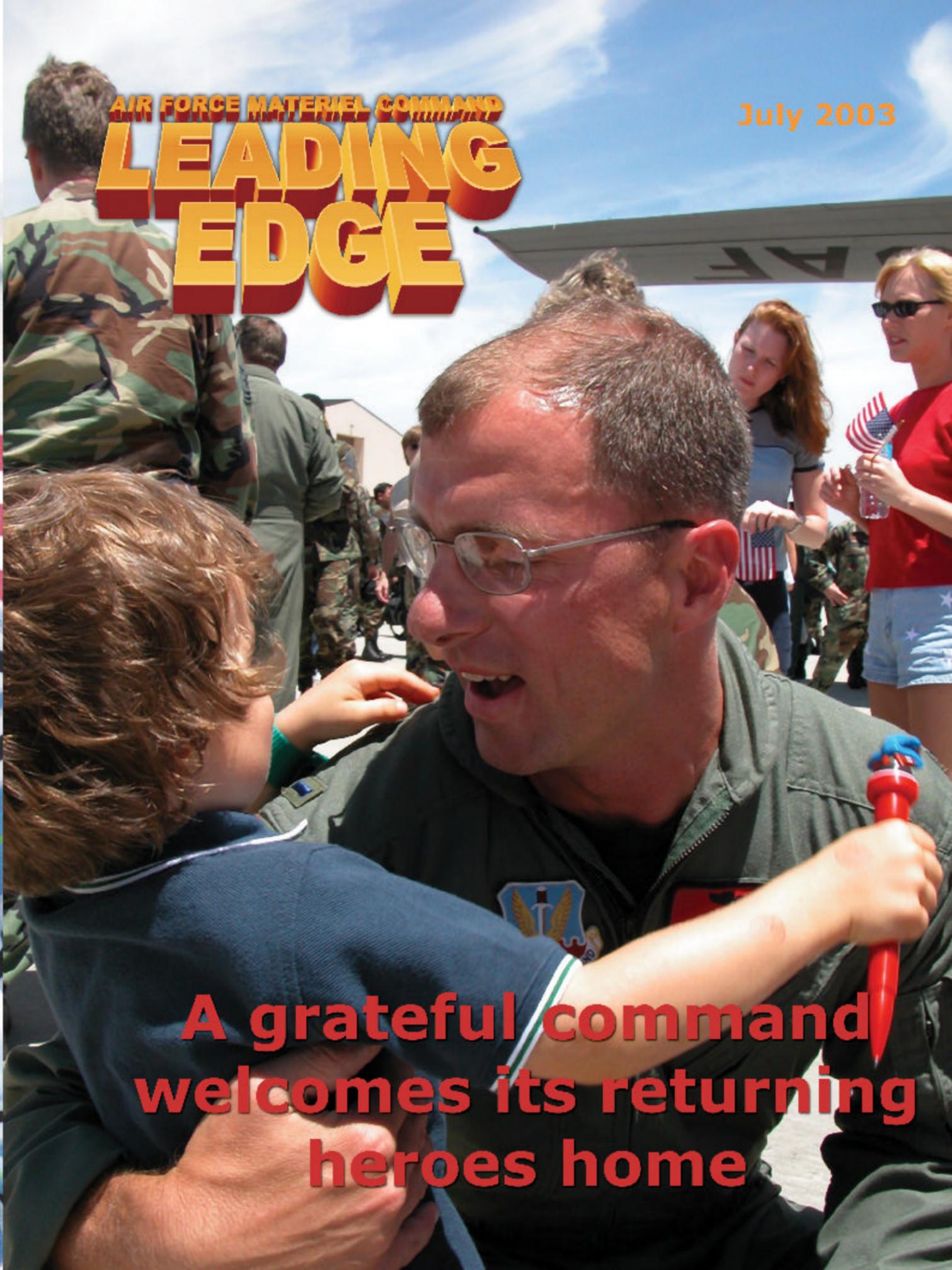
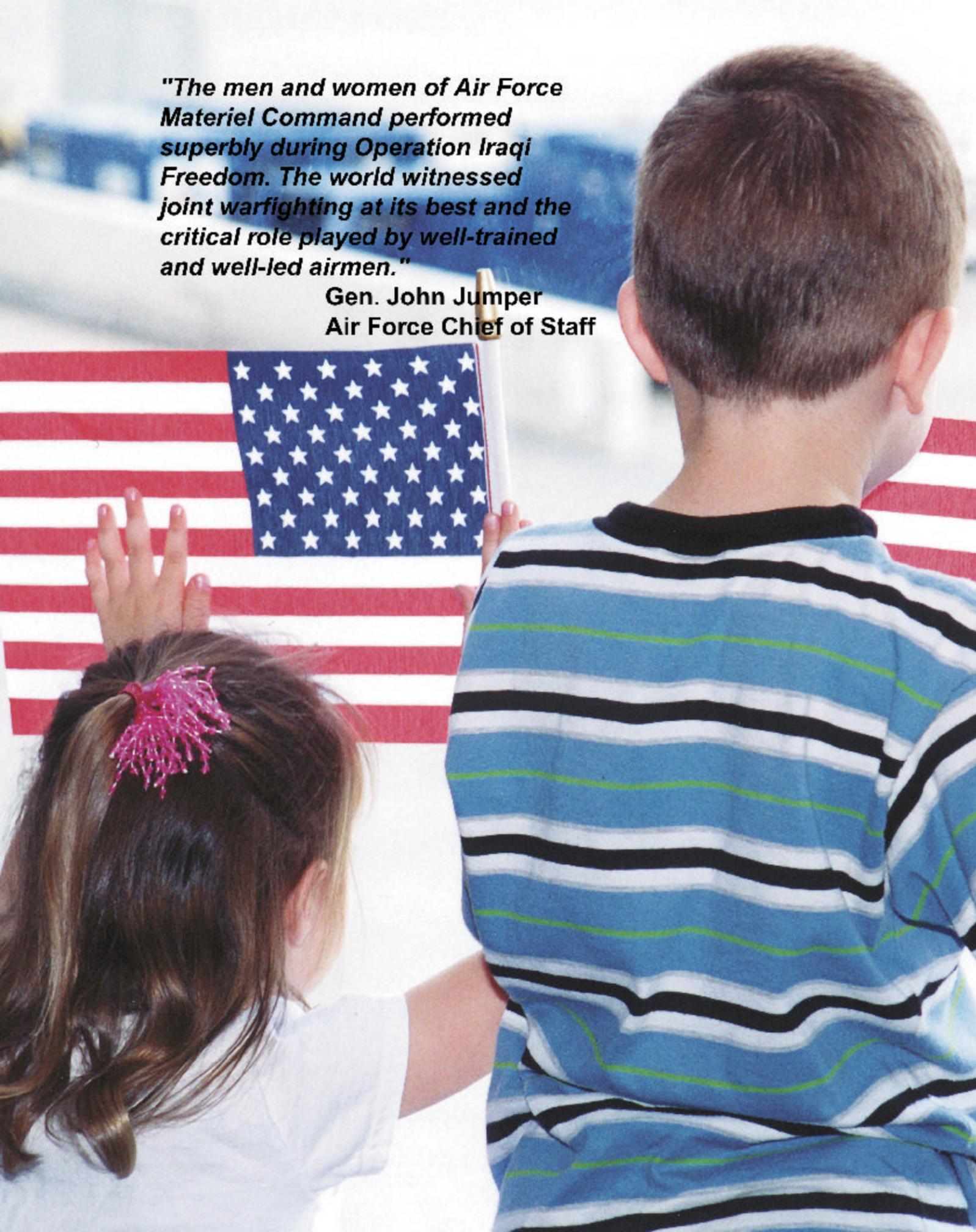


"The men and women of Air Force Materiel Command performed superbly during Operation Iraqi Freedom. The world witnessed joint warfighting at its best and the critical role played by well-trained and well-led airmen."

Gen. John Jumper
Air Force Chief of Staff



AIR FORCE MATERIEL COMMAND
**LEADING
EDGE**

July 2003

**A grateful command
welcomes its returning
heroes home**

LEADING EDGE

Headquarters
Air Force Materiel Command
Wright-Patterson Air Force Base,
Ohio

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Department of Defense
Thomas Jefferson Awards
First Place, Magazine Format,
1996
Second Place, 1998, 1997, 1995

Air Force Media Awards
First Place, Magazine Format,
1998, 1997, 1996, 1995, 1994
Second Place, 2002, 2000, 1993,
1992
Third Place, 2001, 1999

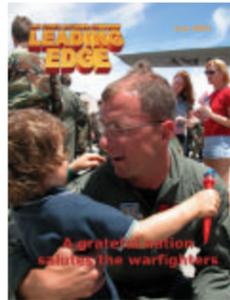


This funded Air Force magazine is an authorized publication published monthly for the people of the Air Force Materiel Command. Contents of LEADING EDGE are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Department of the Air Force. The editorial content is edited, prepared and provided by the Public Affairs Office of Headquarters Air Force Materiel Command, 4375 Chidlaw Rd., RM N152, Wright-Patterson AFB, Ohio 45433-5006. The magazine can be found on the Internet on AFMCPA's home page: http://www.afmc-pub.wpafb.af.mil/HQ-AFMCPA/leading_edge/index.htm. Photographs are official U.S. Air Force photos unless otherwise indicated. Distribution ratio is 8:1. For submission and writers' guidelines, contact the editor at the above address or DSN 787-7602 or (937)257-1203. Send email to: LeadingEdge@wpafb.af.mil.



Cover stories

4 — 13 Welcoming AFMC heroes home



1st Lt. Clayton Laughlin is thrilled to get a hug from son Jack, when he returned from Operation Iraqi Freedom May 2. Read about his return on Page 11. (Photo by Ms. Sue Sapp. Cover design by Ms. Libby Van Hook, Executive Editor)

Throughout Air Force Materiel Command installations, enthusiastic and joyful crowds are welcoming home spouses, parents, friends and co-workers who deployed in support of Operation Iraqi Freedom. As equipment is returned and artifacts are being collected for Operation Tribute to Freedom, a grateful nation welcomes home its heroes with pride.

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Elizabeth and Tyler Nelson press their faces and their patriotism to the airport terminal window, as the plane carrying their dad, Staff Sgt. James Nelson, rolls to a stop. Read about the 654th CLSS returning from serving in Operation Iraqi Freedom on Page 13. (Photo by Ms. Kelly Sharp)

Advanced bearing system could cut engine costs

WRIGHT-PATTERSON AFB, Ohio — Advances in bearing systems for gas turbine engines powering target drones and cruise missiles could cut engine costs by as much as 20 percent and increase fuel efficiency in these air vehicles with limited life applications.

Scientists and engineers in the Air Force Research Laboratory's Propulsion Directorate are testing a bearing using a compliant foil — a thin, flexible sheet of metal — rather than conventional rolling elements like balls or rollers.

An air foil bearing developed under an Air Force Small Business Innovation Research contract by Mohawk Innovative Technology Inc. is being tested in a WJ24-8 target drone engine at Williams International, in Walled Lake, Mich. Tests are expected to be completed early this summer. The advanced bearings support an engine's rotor on a hydrodynamic air film eliminating the need for rolling element bearings and their associated liquid lubrication system.

— Reported by AFRL Public Affairs

Benchmarking cuts Hill maintenance time in half

HILL AIR FORCE BASE, Utah — Maintaining, repairing, manufacturing and modifying F-16 and KC-135 landing gears, wheels and brakes takes nearly half the time today as it did last quarter thanks to Hill maintainers becoming more efficient.

Maintenance directorate landing gear production branch experts here recently reduced flow days for the F-16 items from 95 to 58. KC-135 program experts reduced flow days from 118 to 61. This means repair and replacement work is done an average of 37 and 57 days faster, respectively. Ultimately, branch workers hope to attain end goals of 38 days for the F-16 and 58 days for the KC-135, meaning that work that used to take three to four months will be done in about two.

— Reported by OO-ALC Public Affairs

Eglin completes new payload in record time

EGLIN AIR FORCE BASE, Fla. — Eglin munitions experts recently gave America's warfighters a new weapon that



Hill prepares F-16s for Italian air force

HILL AIR FORCE BASE, Utah — Italian defense officials recently accepted the first of 34 modified and refurbished F-16 Fighting Falcon A and B models from experts here. Maj. Gen. Tommaso Ferro, air defense and defense cooperation attaché for the Italian air force, led a delegation of military and diplomatic dignitaries in accepting aircraft purchased under the Defense Department's foreign military sales program. The final F-16 delivery to Italy is scheduled for November 2004. Ogden Air Logistics Center provides total support for America's F-16 fleet by modifying and upgrading existing models.

Brought up from the Aircraft Maintenance and Regeneration Center, Davis-Monthan AFB, Ariz., the F-16s have undergone refurbishment and upgrades to comply with all technical compliance-technical orders changes since the aircraft was placed in stasis in Arizona. Depot teams also made modifications, including replacing some bulkheads, refurbishing landing gear and replacing the flight controls actuators.

— Reported by OO-ALC Public Affairs

destroys targets with kinetic energy rather than explosives, and they had the initial capability available a mere 98 days after receiving the request.

The Passive Attack Weapon houses various sizes of penetrator rods inside what Dr. John Pletcher, Area Attack Weapons Systems Program Office technical director, called a "large water heater with fins." Guided by a wind-corrected munitions dispenser tail kit to improve accuracy, the munition's full production of weapons was completed in 180 days.

Given the initial tasking Sept. 10, experts from the Air Armament Center, Air Force Operational Test and Evaluation Center, Air Force Research Laboratory Munitions Directorate and 53rd Wing had developed, tested and delivered the new CBU-107 Passive Attack Weapon by December. The weapon's full production was completed March 9.

— Reported by AAC Public Affairs

Lean processes increase Tinker unit's productivity

TINKER AIR FORCE BASE, Okla. — Maintainers here are producing nearly

twice as many constant speed drives per month, reducing backorders by more than half and eliminating mission-capable aircraft awaiting these parts altogether thanks to new Lean cell efforts.

Nearly all of the Air Force's 5,800 aircraft depend on Tinker's Constant Speed Drive Overhaul Shop members to clean, repair and replace this crucial part that keeps aircraft systems receiving a constant stream of electricity. Benchmarking against private industry, team members realigned the shop's work flow, established new processes and provided workers more equipment to get their jobs done.

Now, instead of mechanics tracking down parts, the total component management area collects all parts and gets them to the mechanic as a kit. Additionally, bright paint, new flooring, new lighting and work benches with electrical and compressed air hook-ups have made jobs easier. Team members also added computers to each workstation, so mechanics can also access work control documents and parts lists from their computers.

— Reported by OC-ALC Public Affairs

Correction: The top photo on Page 41 of the May 2003 Almanac was taken by Tech. Sgt. Scott Reed.

Aircrews donate items; help museum tell OIF story

Several military members started the Operation Iraqi Freedom page in the U.S. Air Force Museum's history book June 4 by donating items they used during OIF missions to be put on display for generations to come.

The museum is located at Wright-Patterson Air Force Base, Ohio.

Retired Maj. Gen. Charles Metcalf, museum director, invited aircrews from Pope AFB, N.C., Ellsworth AFB, S.D., McChord AFB, Wash., and McConnell AFB, Kan., to a brief ceremony at the museum. It's one of many Air Force undertakings as part of Operation Tribute to Freedom to make sure the American people recognize members of the armed forces at home and abroad for their accomplishments and sacrifices in the Global War on Terrorism.

He said the donations will enable museum experts to continue telling the Air Force story and be in the museum's "new accessions" display by the end of June.

Telling a story

"The museum is more a story of people and events and our visitors identify with that," Gen. Metcalf said to open the ceremony. "The inanimate objects that surround you do not feel dedication to duty, loyalty or service to this great nation and sacrifice. The items we'll be receiving today will be instrumental in helping us tell that story."

With that, Lt. Col. Raymond Strasburger, 75th Fighter Squadron operations officer at Pope and OIF A-10 pilot, donated a desert flight suit, desert boots, dog tags, squadron patches, a mini flash light he said came in very useful on OIF missions and an American flag he said flew with him.

He also presented, on behalf of 1st Lt. John Blocher, an A-10 pilot who served as a battalion air liaison officer with the Army's 3rd Infantry Division, a map of Iraq and a forward air controller kit he used to call in air strikes on Baghdad.

"We feel we're not worthy of donating items," Col. Strasburger said. "There are countless others whose combat experiences far exceed our own. And though our recent combat exploits pale in comparison to the original all-volunteer group in

China and the greatest generation, we trust that in some small way the items we donate will serve to protect the legacy of the United States Air Force."

An award-winning crew

Following the A-10 presentation, a B-1 Lancer crew from the 28th Bomb Wing at Ellsworth donated flight suits, a squadron coin, a pin removed from bombs being dropped on Iraqi targets and squadron patches. The crew was awarded the Distinguished Flying Cross for striking a target of opportunity April 7 in Baghdad believed to be a meeting of senior Iraqi leadership.

"...we trust that in some small way the items we donate will serve to protect the legacy of the United States of America."

Lt. Col. Raymond Strasburger

The 28th Bomb Wing is home to the 34th and 37th Bomb Squadrons to which the B-1 crews are assigned. Those crews have a rich history, according to 1st Lt. Joseph Runci, weapon systems officer.

"Under Jimmy Doolittle in World War II, the 34th and 37th Bomb Squadrons trained for and executed a raid on Tokyo which changed the tide of the war," he said. "Carrying on with that tradition, we made our strikes in Iraq."

Next, the McChord-based crew that flew the lead aircraft for the first combat paratrooper drop from a C-17 Globemaster III into northern Iraq March 25 donated an American flag crew members said flew in the aircraft on the historic mission, original flight planning documents and a plain sheet of paper crew members used to compute descent rates for the fleet of cargo giants.

They also donated flight suits, boots and a squadron patch and coin.

"A few years ago people were saying the C-17 will never go into combat," said Lt. Col. Shane Hershman, 7th Airlift Squadron commander who piloted the mission's lead aircraft.

"But we went in for the first combat personnel air drop ever from a C-17 from the largest formation of C-17s ever," he said. "We executed every capability the C-17 was originally bought for during this

mission. In four days, we delivered an entire brigade — more than 2,000 people and 400 vehicles — with less than 12 hours on the ground. The C-17 proved itself through its people."

Making history

And lastly, the KC-135 Stratotanker crew awarded the Distinguished Flying Cross for supporting combat search and rescue efforts for a downed F-15E pilot deep into Iraq April 7, donated a hat, flight crew gloves, a flight suit, navigational charts of Iraq and a boom operator's checklist.

"We flew for 70 minutes over the heart of the Iraqi integrated defense system with no way to fend off radar-guided missiles," said Lt. Col. Jacqueline van Ovost, 384th Air Refueling Squadron commander at McConnell. She was the deployed unit commander when the historic mission was flown.

Looking back

Capt. Tricia Paulsen-Howe, KC-135 wing evaluator navigator, was part of the DFC-winning crew.

She said the mission and donating items takes on special meaning since her father also earned the DFC. He was a C-47 navigator who flew missions in Vietnam.

"I've always been proud of my father," she said. "I didn't plan on becoming a navigator, it just kind of happened. But as I look around the museum and see all the planes and think of the millions of people who have contributed to the success of the Air Force, I'm glad I did. I feel very honored and humbled to contribute something that represents all the men and women who are out there flying missions every day just like we were and like my father used to do."

After receiving all the donations, Gen. Metcalf said the museum staff could further tell the story of Air Force people's dedication and sacrifice.

"If you followed the war on television, you saw the wonderful young people who are serving in selfless service to this great nation," he said. "World War II holds nothing above these people. They've done us a great honor."

— Tech. Sgt. Carl Norman, AFMC Public Affairs

Air Force photo by Mr. Dave Levingston



I LOVE YOU DAD — Braden Urban, son of Capt. Stephen Urban, waits for his father, a nurse deployed with the 377th Medical Group at Kirtland AFB, N.M., to return home May 5. (Photo by Mr. Todd Berenger)



Capt. Stephen Urban meets his 3-month-old son Chaney and rejoins his wife Angela at Albuquerque's airport when the 377th Medical Group's deployment team returned there May 5. Below: Deployed members of the group are greeted with cheers and huge smiles on their return. (Photos by Mr. Todd Berenger)

Enthusiastic crowd greets returning airmen

An enthusiastic and joyful crowd met 377th Medical Group members who returned to Kirtland Air Force Base, N.M., May 5 after deploying in support of Operation Iraqi Freedom.

Of 50 medical group members deployed since last December, two teams returned separately after serving overseas.

Meeting new arrivals

Among family members rejoined were Capt. Stephen Urban, a father who met his 3-month-old son Chaney for the first time at the airport.

"I was so excited to see my family, but feeling a little nervous about what if

Chaney cried when I held him for the first time," Capt. Urban said.

But Chaney didn't cry. "He gave me a look that said everything is all right."

Capt. Urban, a nurse, and his team left for Southwest Asia in January. He said his wife, Angela Urban, "did an awesome job," and thanked her for "all her hard work and dedication to our family during this unbelievable stressful time in our lives."

He also thanked his older son, Braden, for helping his mother and "being a super big brother" to the newest Urban member, and the individuals and groups who offered support and comfort to his family

while he was deployed.

Serving with pride

Capt. Urban said the contributions of those who helped not only his own family but also those of other deployed members "can never be measured." Their goodwill, he said, "truly allows for you all to be considered family and makes me proud to be an American."

Groups of medical personnel had been deployed since late 2002.

Among the teams that deployed from the medical group are:

- The medical patient decontamination team that removes or neutralizes nuclear,

biological and chemical agents on wartime casualties before they are admitted to a medical treatment facility.

- The prevention and aerospace medicine team, basic and sustainment, that provides public health, occupational, environmental, disease assessment, surveillance, intervention and abatement service in short- and long-term situations.

- The mental health rapid response team that provides short-term management of combat and traumatic stress patients, critical incident stress debriefing and command consultation and outreach services.

- The Nursing Augmentation; and the "EMEDS/AFTH C2," that provides personnel for 24-hour sick call and emergency medical care for deployed Aerospace Expeditionary Forces.

— Ms. Jennifer West, 377th ABW Public Affairs





Families of Tinker AFB, Okla., 507th Air Refueling Wing reservists wait for their loved ones to return from their overseas assignments. Some members will only be home a few weeks before deploying to support a previously scheduled European mission. (Air Force photo by 1st Lt. Bill Pierce)

Reunions might be short-lived

Overseas mission may take reservists away from home again

Nearly 50 reservists and three KC-135R Stratotankers from the 507th Air Refueling Wing, Tinker Air Force Base, Okla., returned Memorial Day weekend knowing their mission overseas has by no means come to an end.

As Operations Enduring Freedom and Iraqi Freedom wind down, the returning members and the hundreds still activated prepare for a new mission in Europe.

Initially, 230 reservists from the 507th ARW were activated in February with more than half forward deployed overseas to Southwest Asia in support of Operations Enduring Freedom and Iraqi Freedom.

Family and friends were on hand throughout the weekend to greet the returning reservists, but according to the wing commander, Col. Dean Despinoy, the unit will continue to support an overseas

deployment schedule in the foreseeable future.

He explained that originally, all the deploying reservists were forward deployed to the Southwest Asia area of operations in support of Operations Enduring Freedom and Iraqi Freedom.

With the presidential declaration of the end of major hostilities, the Oklahoma reservists will now be rotating out of one forward deployed location to another in Europe.

"Our unit was already scheduled to spend a rotation overseas during this time to support ongoing defense operations. We are simply stepping away from one mission and up to another," Col. Despinoy said.

The unit's new mission in Europe does not require as many aircraft and personnel, allowing some members to come home.

"The 230 reservists who

were activated on Feb. 27 are still on active duty," Col. Despinoy said.

"At our new location, we will be teamed up with other reserve refueling units and won't have as many people or aircraft deployed. We are hoping to set up a shorter, regular rotation schedule for our people to allow them to return home to spend time with their family before going back overseas."

On May 29, a refueling aircraft from March Air Reserve Base, Calif., stopped briefly at the 507th ARW and took about 20 reservists to the unit's forward deployed location in the Southwest Asia theater as a backfill for those returning.

The deployed reservists represent an operational flying package consisting of aircrew, maintenance and assorted support positions.

With additional taskings since February, today nearly

250 of the unit's reservists are activated. Under this partial mobilization, 507th ARW reservists are called to active duty for one year with the possibility of extension to no more than two years. The two-year upper limit includes time for mobilization, demobilization and accrued leave. The deployed reservists will remain in place unless called to deploy to another location.

"We are working intensely to support our activated forces. At the same time, we will continue supporting vital refueling requirements for homeland defense," Col. Despinoy said.

Volunteers from the 507th have played a large role in each phase of the Global War on Terrorism, refueling aircraft overseas and stateside in support of national security efforts since Sept. 11, 2001.

— 507th Air Refueling Wing Public Affairs

Squadron makes 3rd Herd history

5-month duty meets mission, leaves families waiting in flux

After an almost six-month deployment in support of Operation Iraqi Freedom, 26 members of the 32nd Combat Communications Squadron left to accomplish a mission and returned June 5 as history makers.

Their return is important because it marks the completion of the first full-scale deployment of the Herd's new theater deployable communications, a state-of-the-art communications suite designed to transmit voice, data and messaging communications, said 1st Lt. Alan Montminy, combat support flight commander of the 32nd CCS.

Equipment transition

"Over the past two years, the Herd has transitioned to the new equipment, moving away from the heavy green boxes, which have, for the past 25 years, been synonymous with the organization," Lt. Montminy said.

The switch to the newer, more compact equipment proved effective, he said.

"The success of the air campaign over Iraq was a direct result of timely and reliable communications such as those provided by the 3rd Herd," he added.

A 36-hour goal

The members, who left Jan. 11, set up telephone, Internet, Secure Internet Protocol Router Network services and other protected messaging systems. They were among the first to arrive at bare bases.

"Civil engineering and security forces went in and

then we followed with the communications systems required to conduct effective command and control of the site and to contact the outside world," Lt. Montminy said.

"The focus is always on establishing communications as quickly as possible, with the goal being full communications services within 36 hours. We recreate the communications services found on any base."

Working hard

Herd members did just that, said Capt. Thor Curcio, deployed forces commander.

"We were probably the best communications squadron out in the theater," he said. "Every one of these guys went out there and kicked butt."

Though they are not the first deployed members of the 3rd Herd to return, they are the largest group.

"We are so excited to have them back," said Lt. Montminy. "We told the spouses to expect no less than six months and anticipate one year, so five-and-a-half months is a long time, but it could have been worse."

New kind of arrival

Capt. Curcio's wife, Joelle Curcio, said she and her husband will do something together that she's been putting off since he left — decorate a nursery.

"I'm about seven months along," she said. "We're going to stay home and get the baby room ready. I haven't put up the crib yet because I wanted him to be a part of it."

Capt. Curcio said he was



Capt. Thor Curcio comforts his 4-year-old son Gunnar before the reunited family heads home after an emotional reunion June 5 at Tinker AFB, Okla. Capt. Curcio deployed in January with his forces from the 32nd Combat Communications Squadron. (Photo by Ms. Margo Wright)

equally excited.

"It's all I've been really thinking about," he said. "I can't wait to go to her next appointment and hear the baby's heartbeat. I know when my first son was born, I went to every appointment and I got to hear the heartbeat every time."

Missing family 'firsts'

Staff Sgt. Christy Snow, who had to leave when her daughter, Kalen, was just 6 months old, echoed the same familial sentiments.

"I just missed my family," she said. "I missed a lot of firsts with [Kalen], but I'm thankful I'm home for her first birthday."

Mr. Ricardo Torres, son of Master Sgt. Ricardo Torres, said he was content to have his dad back.

"This is a big relief to have him home and know he's all right."

— Ms. Amy Welch, OC-ALC Public Affairs

Sgt. Torres' wife, Alice Torres, said the only way she was able to cope with her husband's absence was to maintain continuity.

"We just went on with our daily lives and prayed for his safe return," she said. "We know he's out there for a reason, so we just have to go on day by day."

Maintaining optimism

Twenty-one members of the 32nd CCS remain deployed in support of OIF.

However, with many members returning sooner than expected, family, friends and fellow airmen maintain optimism.

"It's always great to get people back home with their families," Lt. Montminy said.

"Their experiences will be invaluable in improving the overall mission readiness of the squadron."

— Ms. Amy Welch, OC-ALC Public Affairs

Hawk gets thumbs up

OIF success hinges on teamwork, imaging ease

The air vehicle credited with helping shorten the war in Iraq returned to Edwards Air Force Base, Calif., recently after collecting more than 3,700 images and having what officials called a “direct impact on the Republican Guard’s destruction.”

Global Hawk 3 returned after flying surveillance sorties over Baghdad in Operation Iraqi Freedom. It landed about 72 hours after major combat operations in Iraq were officially over.

Lt. Col. Guy Cooper, 12th Reconnaissance Squadron commander at Beale AFB, Calif., said, “Success of the Global Hawk in OIF can be directly attributed to the fabulous sense of teamwork between the Edwards’ testers and operators who employed it in Iraq. This teamwork made the Global Hawk’s war-winning effort a completely seamless operation. Global Hawk and the team behind it definitely helped shorten the war.”

During OIF, the Global Hawk only flew approximately 5 percent of the surveillance missions, but accounted for more than 55 percent of the information on time-sensitive targets, said Lt. Col. Michael Guidry, 452nd Flight Test Squadron commander, Edwards.

“Time-sensitive targets are imaged and,

within a short amount of time, assessed and a decision is made whether or not to take action such as target destruction,” Lt. Col. Guidry said.

In addition to the Global Hawk, Edwards experts also deployed more than

“It’s an amazing system and it provided a capability and a set of options for the air commander and for the combatant commander that’s just outstanding. We’re at a threshold of something exciting and new with unmanned aerial vehicles.”

Lt. Gen. Michael Moseley

100 tons of equipment, including maintenance gear and other supplies needed at the deployed location.

“It took four C-17s to load all the supplies they took,” said Lt. Col. Guidry.

More than 50 people, some from Edwards and others from Beale, also deployed to pilot and maintain the Global

Hawk at its forward-deployed location.

“It was a mix of both military and civilian contractor support personnel, however, the contractors are the ones who did most of the maintenance,” said Lt. Col. Guidry.

Lt. Col. Guidry added that the Global Hawk also provided the proof needed to test unmanned aerial vehicles’ reachback capabilities.

“Reachback gives us the capability to pilot a UAV anywhere in the world from a continental United States base of operations,” said Lt. Col. Guidry. “During OIF, the Global Hawk validated the operations capability of reachback.”

The Global Hawk was a formidable tool in the war, new and powerful, according to Lt. Gen. Michael Moseley, 9th Air Force commander and the Combined Forces Air Component commander for OIF.

“From the beginning we had Global Hawk over the top of Baghdad,” said Lt. Gen. Moseley. “It’s an amazing system and it provided a capability and a set of options for the air commander and for the combatant commander that’s just outstanding. We’re at a threshold of something exciting and new with unmanned aerial vehicles.”

— Airman 1st Class Matthew Dillier, AFFTC Public Affairs



The Global Hawk has been credited by some as bringing the war in Iraq to a much sooner end. According to Lt. Col. Guy Cooper, 12th Reconnaissance Squadron commander at Beale AFB, Calif., teamwork played a big role in the success of Global Hawk’s war-winning efforts. Both the air vehicle itself and the people behind it were among the factors helping to bring the war to a close. (Courtesy photo)



Shuji Gillis, 3, is overcome by emotion as he greets his father, Capt. Kouji Gillis of the 116th Air Control Wing, Robins AFB, Ga. Capt. Gillis returned home to Robins aboard one of the unit’s E-8 JSTARS surveillance aircraft after being deployed in the Middle East in support of Operation Iraqi Freedom. (Photo by Airman 1st Class Tim Beckham)

116th comes home to Robins

People smiling, children laughing and spouses hugging has been the scene on the Joint STARS flight line at Robins Air Force Base, Ga., recently.

The 116th Air Control Wing has had about 250 JSTARS members return from deployment since the first jet landed May 2. Since then, six more aircraft have returned with 116th troops, who have been supporting Operation Iraqi Freedom.

Members of the wing have been trickling in one and two aircraft at a time, after what was for some a long deployment.

A long time coming

“This was my first deployment, and it was a pretty long one,” said Airman 1st Class Geno Yerdon, from the 12th Airborne Command and Control Squadron. “I just tried to stay busy and not think about coming home, which made the time go by much faster.”

Although the troops agreed it was nice to be home, they all

were proud to have defended their country.

“I was happy to be over there supporting OIF — after all, it is my job,” said Airman Yerdon, who returned May 7. “But I have been gone since the middle of January, so it feels great to be home.”

Tears of happiness

The feeling on the flight line was gut wrenching for some to watch, as a JSTARS lieutenant walked off the plane and saw his son for the first time.

Happy tears streamed down the faces of many who looked on as 2nd Lt. Eric Smith of the 12th ACCS held his newborn son Jett in his arms.

The JSTARS patriots have been coming home in groups of 20-40, but on this day nearly 100 troops made their ways home, and emotions on the JSTARS ramp ran high. Family members were waving flags, holding signs and wearing red, white and blue.

The 116th troops all agreed that it was great to have a heroes’ homecoming after an operation that meant so much to the United States.

There are about 300 JSTARS members still deployed supporting OIF, according to officials.

— Airman 1st Class Tim Beckham, 116th ACW Public Affairs

Showers don't rain on sunny reunions

Families, Knights eager for returns

Nearly 50 Black Knights returned to Robins Air Force Base, Ga., June 7 on two KC-135 aircraft as a steady summer rain pounded the flight line where tearful spouses, children and friends eagerly welcomed their heroes home with hugs, kisses and banners of pride-filled messages.

'Missed these little hugs'

Tech. Sgt. Tony Yake, with the 19th Aircraft Maintenance Squadron, said seeing his wife Cindy and daughters, Heather, 10, and Whitney, 16, running toward him in the pouring rain was a welcomed sight after spending nearly 96 days in the desert.

"Words can't explain it," he said. "I'm still in shock. I can't remember when I've seen rain like this. It feels so good to be home. I've missed these little hugs."

Expecting to return in September, Black Knights said they were surprised with the news of an early homecoming, only weeks ago.

Capt. David Wieland, with the 99th Air Refueling Squadron, said he bridged the distance with girlfriend, Ms. Sara Maranowicz, and his parents through e-mail messages and phone calls, but nothing could prepare him for the emotions he felt seeing them after being away for nearly four months.

Lots of gratitude

"As tankers, we had our hand in nearly every fight," Capt. Wieland said. "I'm incredibly grateful to be one of four kids to go into combat and come out alive. It's



Tech. Sgt. Tony Yake embraces his wife Cindy and daughters, Heather and Whitney, after spending nearly 96 days in the desert. (U.S. Air Force photo by Ed Aspera)

great being home. This is awesome."

Capt. Wieland's parents, who traveled from Colorado, said they are proud of their son's service, but thankful he's home.

"As his mom, I always worry about

"My wife is making my favorite dinner — fried chicken, and we're going to relax. Right now, dinner and a shower that lasts longer than three minutes is celebration enough for me. I'm just glad to be home again."

Tech. Sgt. Dean Merida

him," said Mrs. Diane Wieland. "I'm so glad he made it home safely. Now, it's time to spend some time together. I'm sure he has plenty of war stories to share."

Families weren't the only ones to bring bright smiles to the 44 Black Knights' rainy homecoming.

Ms. Kacie Hammock and Ms. Lauwren

Anderson left early from a friend's wedding in order to give their friend, Senior Airman Jake Calderon, of the 19th AMXS, a hero's welcome.

A welcome home

"I'm so glad God brought him back safely," Ms. Hammock said. "I'm so excited! I can't wait to see him."

Col. Barbara Faulkenberry, 19th Air Refueling Group commander, said she commends the Black Knights for a job well done.

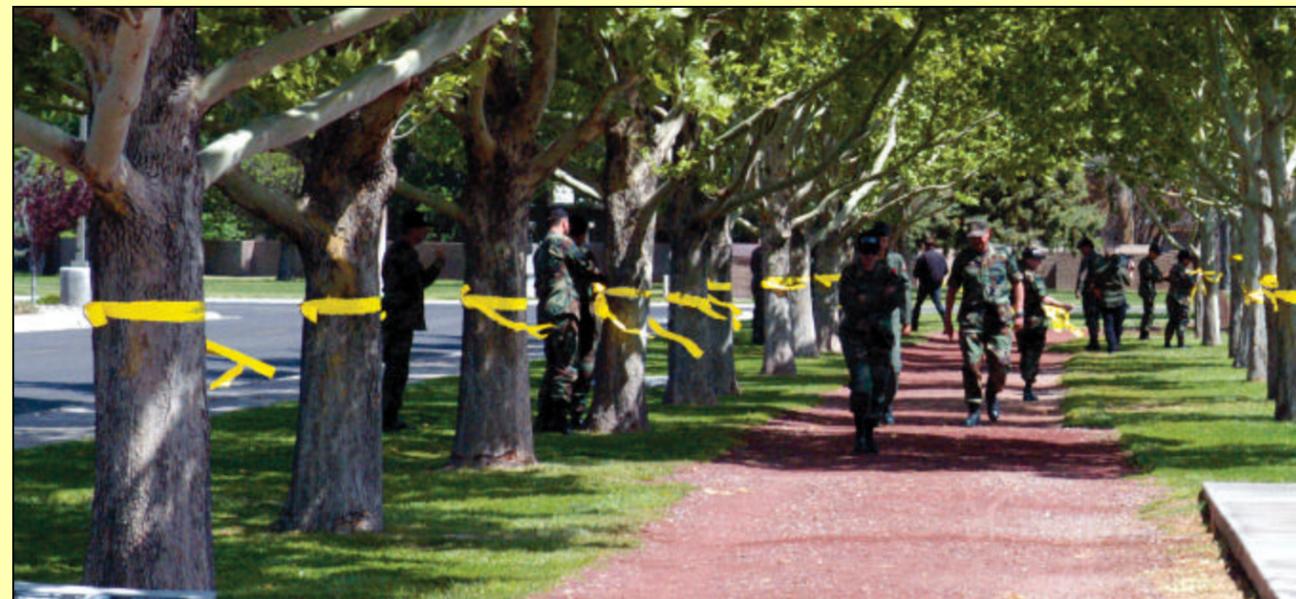
"I join everyone — the Black Knights, the local community, and all the American public in welcoming these airmen home," she said. "They have served their nation professionally and proudly during this time of war."

The little things

While many had parties and other festivities planned to mark the happy occasion, Tech. Sgt. Dean Merida and his wife, Lori, had a simpler evening in mind.

"My wife is making my favorite dinner — fried chicken, and we're going to relax," he said. "Right now, dinner and a shower that lasts longer than three minutes is celebration enough for me. I'm just glad to be home again."

— Ms. Holly Logan, WR-ALC Public Affairs



COLORS OF SPRING INCLUDE YELLOW — The Kirtland Air Force Base, N.M., Top 3 Association invited TEAM KIRTLAND to help tie yellow ribbons on trees around Hardin Field May 8 to show support for deployed personnel. Master Sgt. Jeff Harris, Air Force Safety Center, with the association said members and other helpers tied the ribbons meant to be "a great reminder of our dedication, respect and support toward our deployed personnel and their families." The association's hope is that returning personnel will enjoy seeing the ribbons. (Courtesy photo)

Deployed repair teams return to Tinker

They have been called the warfighters' most valuable insurance policy, the first to get the call when an aircraft in a combat zone can't get off the ground. Now, 21 airmen in the 654th Combat Logistics Support Squadron from Tinker Air Force Base, Okla., who were deployed and poised to repair those battle-damaged aircraft are trickling home, returning from a fight one airman said was all in a day's work.

"It's nice to know you are a needed commodity," said Master Sgt. Wesley Durant, an aircraft maintenance superintendent who recently returned from his deployed location. "Our biggest goal is while we're there to not be needed."

Sgt. Durant's team assisted with the temporary installation of a camera in all assigned B-

1B aircraft to record data displayed on the Offensive and Defensive Systems Officer stations. Data recorded on these cameras will be used for bomb targeting, bomb release and bomb damage assessment. They also repaired a KC-135R's wing fillet flap in less than six hours and performed other repairs necessary for combat.

"A lot of team training and planning makes their job in the field look easy," said Lt. Col. Gregory Broadt, 654th CLSS commander. "We bring invaluable experience and skills to the deployed commanders in the area of responsibility. Our technicians and engineers ensure Tinker's support to our bombers and tankers all the way to the front lines."

Col. Broadt himself is deployed to Ramstein Air Base, Germany, on a com-

mand and control team that coordinates CLSS activities throughout the European area.

Another team, deployed to a different location but also supporting Operation Iraqi Freedom, did "everything from fix vehicles to fix airplanes," said Master Sgt. David Cummings, a B-52 element chief. "The B-52s were very lucky on this trip. The aircraft were fired on and never hit, so we got very lucky."

Even without battle-damaged aircraft, both Tinker teams had plenty of repair jobs to keep them busy 12 hours a day, seven days a week.

"We help the field with whatever it is they need," Sgt. Cummings said. When a brake line broke in the crane used to lift aircraft engines, the squadron stepped in to help.

"The maintenance chief

came and asked us, 'Can you make another line for this?' and I performed a hydraulic insertion on it and actually we got the crane fixed and were able to change engines on the airplane," he said.

The team also performed routine inspections, helped inspect entire fleets with suspected problems and installed modifications on aircraft in the field.

For modification jobs, the air logistics centers build a kit with everything needed to perform the modification and ship it to the field.

Although both men were glad to return to Tinker within 60 days of leaving for what was expected to be a six- to eight-month deployment, they are left with memories they won't soon forget.

— Ms. Amy Schiess, OC-ALC Public Affairs

USAF Museum's third building opened

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The U.S. Air Force's national museum is poised on the threshold of a new era with the opening of the Eugene Kettering Gallery.

Museum restoration staff members worked intensively preparing the building for opening in June, conducting a massive move of numerous major aircraft into the hangar in early April. Noteworthy aircraft in the building include the B-36, F-117 stealth fighter, F-15, F-16 in U.S. Air Force Thunderbird markings, A-10, AC-130 Gunship, RB-47H, U-2 and SR-71, among others. Other notable aircraft scheduled to find a home in the new building include the B-1B Lancer and the B-2 Spirit stealth bomber.

The new building is the centerpiece of a major expansion vision that will include a hall of missiles, a space gallery, a Presidential Gallery and an education center.

Construction has begun on the hall of missiles, with the silo-like structure's steel frame quickly forming. Completion is targeted for January 2004, with construction of other phases to follow.

— Reported by USAF Museum Public Affairs

AFRL-Rome workers awarded AGPU patent

ROME, N.Y. — Two members of the Air Force Research Laboratory Information Directorate's Modeling and Fabrication Shop have been awarded a patent for their development of an advanced aircraft ground power unit.

Mr. Michael Iselo, shop supervisor, and Mr. Timothy Hurley, production controller, shared the patent award with Mr. Paul Sargent, a contract employee with L&E Associates and Mr. Anthony Brown, currently assigned on active duty with the Army in Tennessee.

The four developed a self-propelled support unit for the Army's new Comanche helicopter after a full-scale model of the futuristic stealth aircraft arrived at Rome for a series of antenna measurement tests at the directorate's upside-down Air Force research facility.

Advanced aircraft ground power units are used to provide hydraulic, electrical, cooling and pneumatic air to operate all



CHICAGO — Gen. Lester Lyles, commander, Air Force Materiel Command (left), and Gen. Donald Cook, commander, Air Education and Training Command, carry a wreath honoring U.S. war dead while attending a ceremony at the Eternal Flame Memorial here on May 24. (U.S. Air Force photo by Mr. Russ Maheras)

systems on an aircraft without having to actually run onboard power units.

— Reported by AFRL Public Affairs

Two Brooks organization merge to form AFIOH

BROOKS CITY BASE, Texas — In a progressive move that bolsters the Air Force's capability to effectively respond to global health challenges affecting America's warfighters and civilian communities, the Air Force Institute For Operational Health was officially established during a May 2 re-designation ceremony here that merged two Brooks-based organizations.

The 311th Human Systems Wing's AFIOH was formed through the merger of the Air Force Institute for Environment, Safety and Occupational Health Risk Analysis with the Development Center for Operational Medicine, formerly known as DCOM.

The merger has expanded Air Force operational health to include support of emergency first responders such as firefighters and police who have become part of the war on terrorism since the Sept. 11,

2001, terrorist attacks.

— Reported by 311th HSW Public Affairs

C-17 modification marks new Robins partnership

ROBINS AIR FORCE BASE, Ga. — In a ceremony May 1 celebrating the first C-17 to go through the global reach improvement program here, Lt. Gen. Charles Coolidge, Air Force Materiel Command vice commander, received the symbolic hand off of Form 981, returning the aircraft, known as P-13, to Air Mobility Command.

Gen. Coolidge then handed off the aircraft to Capt. John Holani, aircrew captain, to return the plane to its home station, a significant step forward for the public-private partnership between the Boeing Company and the Warner Robins Air Logistics Center.

The increased workload was brought to Robins as a result of the Globemaster sustainment partnership between the U.S. Air Force, the center and Boeing.

— Reported by WR-ALC Public Affairs

X-45A, T-33 trainer meld to make a good match

Union of old, new spells test success

The vintage aircraft T-33 trainer jet has recently been brought back to life and is now married to the X-45A Unmanned

Combat Air Vehicle in an effort to improve the Air Force's unmanned flying and fighting technology.

The T-33 was revamped through the combined efforts of Boeing, the Defense Advanced Research Projects Agency and Eglin Air Force Base, Fla.

By reviving the T-33 built in 1955 and filling its guts with unmanned combat air vehicle electronics, operators on the ground were able to remotely command the craft via computer in air-traffic-controlled airspace among manned aircraft.

'With a click of a mouse'

"We had two pilots on the ground in a control van sitting in front of a computer screen looking at a map with global positioning system coordinates on it," said Master Sgt. Joseph Ray, 46th Operation Support Squadron Air Traffic Control Standard and Evaluation chief.

"Then based on the instructions that either the tower or radar issued, they would control the aircraft with a click of a mouse from GPS point to GPS point."

This flying weapon system was tested



The X-45A Unmanned Combat Air Vehicle is the result of efforts by Boeing, DARPA and Eglin AFB, Fla. The X-45A uses equipment similar to that of the old T-33. (Artist rendering)

to determine whether an unmanned air vehicle could be safely controlled within the same air traffic controlled airspace with manned aircraft, while also under direct control of an operator on the ground.

Interactive testing

"The UCAV needs to play well in the sandbox with manned aircraft and that is what this test was about," said Col. Pat Duffy, 46th Operation Group commander. "The UCAV is intended to be capable of being primarily an autonomous vehicle; however, we do put man in the loop so that it is adaptive to interact with manned aircraft and ground controllers."

This goal of a joint manned/unmanned air world came closer to actualization during March, when tests demonstrated that an autonomous unmanned aircraft controlled from the ground could be successfully integrated into air-traffic-controlled airspace with manned aircraft, said Ms.



The T-33, revived from the 1950s, made an ideal partner for the X-45A because of the potential its large equipment bay and flying characteristics offer. (Courtesy photo)

Jan Walker, DARPA spokeswoman.

The T-33 was selected because it has a very large equipment bay in the nose where an autopilot and electronics pallet could be installed and because, in the traffic pattern, its flying characteristics are similar to the UCAV X-45A.

This equipment contained the same communications, navigation and guidance avionics hardware and software as the actual UCAV air vehicle.

Merging efforts

"When activated by the T-33 pilot, the UCAV pallet directly commands the autopilot and flies the T-33 just as it flies a X-45A," said Mr. Andrew Gutierrez, UCAV X-45A chief systems engineer.

After activation, the efforts of the operators on the ground, air traffic control and radar approach control were pooled to ensure the safety and success of the test.

This successful and safe completion of the test gave way to reflection on the future of air combat.

"The T-33 is the trainer version of the P-80, the first production U.S. jet, with that first trainer we are now testing what we hope will become the forerunner for the first unmanned operational jet designed from inception for combat," Col. Duffy said.

The marriage of the T-33 and the UCAV is complete and the successful test at Eglin has led the future of the UCAV safely into its honeymoon.

— 2nd Lt. Jessica Phelps, AAC Public Affairs



U.S. Air Force photo

B-52 Avionics Mid-life Improvement flies into future

Two recent tests fly over North Pole, international date line ensuring flight capabilities until 2040

The B-52H Avionics Mid-life Improvement project recently completed two missions at Edwards Air Force Base, Calif., to test new hardware and software upgrades in extreme conditions around the world. The missions were part of the research and developmental tests before it moves to operational test and evaluation, allowing the B-52 to continue flying until 2040.

The missions tested the new hardware and software's ability to continue navigation over the different poles of the earth, the date line and other places in the world that have different magnetic readings.

"The purpose of these two sorties was to ensure that the B-52 AMI system is ready to go when the first phase, dedicated operational test hits this September," said Lt. Col. Shawn Fleming, Air Force Operational Test and Evaluation Center AMI operational test director.

The first test was April 22. The 419th Flight Test Squadron launched a 16-hour B-52 AMI test mission at 75 degrees

north latitude — close to the North Pole.

The purpose was to verify proper operation of the equipment where the magnetic variation from true north and magnetic north is greatest. The flight tested the new systems' ability to accurately navigate near the North Pole while recognizing the skewed magnetic lines.

"Flying at high latitudes places unique stresses on navigational systems since the meridians of longitude are much closer together," said Col. Fleming. "The purpose of this sortie was to ensure that the AMI system properly handled flight at these high latitudes."

The second mission was a 22-hour mission May 1 over the equator west of Hawaii. The sortie was flown to the equator and international date line with the primary purpose of ensuring the navigation system properly handled multiple crossings of the equator — flying from all different directions with multiple crossings of the international date line and equator.

With both missions proving the

upgrades will work properly, the developmental tests were considered successful, and the AMI program is continuing as planned, with testing scheduled to continue through December 2004.

While the overall test objective is to evaluate B-52 mission capabilities, performance and suitability, the AMI program is specifically designed to upgrade the B-52H Offensive Avionics System. This upgrade includes replacing the inertial navigation system, the avionics control unit, the data transfer system and all associated hardware and software.

"This will allow the B-52 to operate with the newest technology, weapons and then some," said Maj. Merrice Spencer, AMI project navigator and chief of B-52 avionics and weapons integration. "Without this avionics upgrade, there is no way weapons coming on line today or in the future will be able to operate with the B-52 as their platform."

All Air Force B-52s are scheduled to receive this upgrade by 2007.

— Airman 1st Class Wes Auldridge, AFFTC Public Affairs

Unique finds clutter office

Animals, oddities are among items at Tinker division

Refrigerators, stuffed fish or the occasional live animal aren't uncommon finds in the defense reutilization marketing office at Tinker Air Force Base, Okla., which recycles unused or extra Defense Department property.

"When the May 3, 1999, tornado came through Tinker and wiped the stables out, we received accountability of a live horse," said Mr. William Hardin, DRMO receiver.

Unusual discoveries

Mr. Richard Crandall, DRMO chief, said he can only think of a few other awkward items.

"Periodically we receive CPR dolls, which isn't unusual in and of itself," Mr. Crandall said. "But when you get a box of stuff and see just this arm hanging out, all you can think is, 'Oh, no.'"

Mr. Crandall said clothing, computers, furniture, vehicles and aircraft parts account for 85 percent of the property.

Trash to treasure

The marketing office reutilizes all excess or surplus Defense Department property through an intricate process.

"Defense Department activities turn in excess property utilizing a 1348-1 form that comes to the marketing office," Mr. Crandall explained. "We run it through what's called a 42-day cycle and it's offered for reutilization, transfer and donation."

Reutilization — when other Defense Department divisions request items — occurs frequently.

The marketing office can

also transfer discarded items to other federal agencies like the FBI or donate them to state agencies.

If nobody claims the items, the marketing office uses a sales partner to liquidate them to the public.

Up for bids

"They have several ways of selling property," Mr. Crandall said. "They have negotiated sales, auctions and sealed bids."

Much like the Web site ebay.com, items listed are categorized and auctioned or sold at various times to anyone with the highest bid.

In the event of a sale, Mr. Crandall explained the Defense Department reaps benefits as well.

Most all will sell

"There's a contract up front that the sales partner pay a small percentage of the property value," he said. "Then, after the property is sold, a portion of the revenue comes back to the government."

Mr. Crandall insisted nothing is left behind.

"Everything here will sell," he said. "Your mom-and-pop operations buy a lot of furniture and clothing. The surplus stores that have clothing get a lot of it from the marketing offices."

From the inventory list, the items then get transferred to the Web site.

Worldwide market

Mr. Crandall said the Defense Reutilization Marketing Service Web site includes every marketing office in the



Mr. Tony Stewart, a property disposal specialist with the defense reutilization marketing office at Tinker AFB, Okla., prepares medical equipment for charitable donation in the office's warehouse. (Photo by Ms. Margo Wright)

world along with their listings of inventory.

After two weeks the items are fair game to other organizations and, after 42 days, to the public.

Separating scraps

Another function of the marketing office is recycling.

"We receive an average of 3 million pounds of scrap metal per year," Mr. Crandall said. "Every scrap has a different code and by segregating the different scraps, we increase revenue back to the base under the recycle program."

Additional recovery efforts

include the \$3 million conforming storage facility which opened in August 2002.

In a facility filled with desks, lamps, wall lockers and damaged plane parts, Mr. Crandall resides as the treasure king.

He pointed to the shell of a flight simulator and joked, "Now, who wouldn't want that?"

For more on the marketing office or to see items for bid, visit <http://www.drms.dla.mil/> — Ms. Amy Welch, OC-ALC Public Affairs



A number of native flowers, such as these purple coneflowers, are among the plant life found on Huffman Prairie at Wright-Patterson AFB, Ohio. A replica of the 1905 hanger where the Wright brothers perfected the airplane stands in the background. (U.S. Air Force Photo by Mr. Henry Narducci Jr.)

Efforts save past for the future

Flight history, nature get helping hand from base, volunteer groups

Flora, fauna and a volume of history are able to live at Wright-Patterson Air Force Base, Ohio, thanks to a collaborative effort among the office of environmental management, the base and local community members and organizations.

Their more than a decade's worth of work aims to oversee the base's legacy of assets.

"We continue to be thrilled with the extensive cooperation and support we receive from other base organizations, the National Park Service and local non-profit agencies," said Mr. Ron Lester, director of environmental management. "Without their assistance and dedication, our success in preserving these natural and cultural resource treasures here on base would not be possible."

The base's more than 8,000 acres contain a diversity of natural resources. Forests, fields, streams, a major river, ponds, lakes and wetlands — as well as

"Without their (groups) assistance and dedication, our success in preserving these natural and cultural resource treasures here on base would not be possible."

Mr. Ron Lester

one of the largest tallgrass prairie remnants in Ohio, Huffman Prairie — can be found on the base. The prairie's 109 acres

are home to 184 catalogued native and non-native plant species. These include woody plants, herbaceous flowering plants and various grasses.

The base is also home to a few of Ohio's endangered and threatened species. Two found on the natural prairie itself are the blazing star stemborer moth and the sedge wren.

Ms. Terri Lucas, the base's natural resources manager, maintains the prairie in cooperation with the Ohio chapter of The Nature Conservancy and Five Rivers MetroParks.

Ongoing restoration activities include removal of invasive species, seed collection and subsequent sowing in areas where non-native species have been removed. Efforts also include annual rotating controlled burns, periodic mow-

ing of selected areas, and monitoring of the prairie through surveys of birds, moths, butterflies and plants.

Volunteers from The Nature Conservancy periodically meet Saturday mornings to remove the invading species, like poison hemlock, and to collect and sow the seeds of big bluestem and Indian grasses.

Discovering new species

Conservation efforts are far-reaching and also include wildlife preservation.

More than 1,000 moths, including three new species, were identified thanks to efforts among the Ohio Lepidopterist Society, the Department of Agriculture's Systematic Entomology Laboratory at the Smithsonian Institution and a wildlife diversity grant from the Ohio Department of Natural Resources Division of Wildlife.

Two of the new species, *Glyphidocera wrightorum* and *Gnorimoschema huffmanellum*, were given scientific names that honor, respectively, the Wright brothers and their connection to Huffman Prairie.

"A fitting acknowledgment of their relationship," said Ms. Lucas, "since these moths were really 'first in flight'!"

Flying field and memorial hill

Though the flora and fauna of the Wright brothers' days still exist on Huffman Prairie, it is not uncommon for a C-141 Starlifter or an F-16 Falcon to intermingle with the scenery of the past.

These present-day aircraft fly over the adjacent Huffman Prairie Flying Field, where the Wright brothers perfected the airplane in 1904 and 1905.

More than a decade ago, the 84-acre flying field was declared a unit of a



Among the rare birds that nest in the Huffman Prairie are the bobolink, pictured here with its nestlings. (Photo by Mr. Mark Dillon)

national historic park.

The National Park Service and the base placed exhibits around the perimeter of the flying field and also kicked off the centennial year with the Dec. 17, 2002, inauguration of the interpretive center for the field.

The center is located in a separate 27-acre park on the Wright Memorial Hill, overlooking the flying field.

Focus on centennial

With the Centennial of Flight celebrations, these sites are coming into the limelight. Base officials are expecting an

unprecedented number of visitors during the year-long centennial celebrations that began last December — the 99th anniversary of the Wright Brothers first controlled, powered, heavier-than-air flights at Kitty Hawk, N.C.

With the grand rededication of the flying field scheduled for July 16, 2003, and the crowds that will participate in Inventing Flight activities from July 3 through July 20, this promises to be a busy time for the base's environmental management and the park service.

— Ms. Susan Ferns, ASC Public Affairs

EOD team clears range of unexploded ordnance from years of testing

The sun beats down on a four-man team as they scan a cylindrical canister lying at their feet. Days or months earlier or even years, it was a bomb used on a targeting practice run at Edwards Air Force Base, Calif. Now it just sits there, motionless, waiting for someone or something to detonate it. This is a job for the 95th Air Base Wing Explosive Ordnance Disposal Division.

Each year, the division clears 20 percent of Edwards' two ranges of any unexploded ordnance to meet the five-year requirement to completely clear all ranges of unexploded ordnance, or UXOs.

"Units can clear their ranges in one of two ways — all at once, every five years, or 20 percent per year so they achieve 100 percent clearance by the five year mark," said Staff Sgt. James Barringer,

EOD technical administration noncommissioned officer in charge. The ranges must be cleared regularly to ensure the safety of all who use them.

"By clearing the area, we enable range personnel to safely maintain the ranges for the pilots," said Staff Sgt. Neil Gertiser, 95th EOD division operations NCOIC. "That's our main priority; we want to make sure it is safe for everyone."

In addition to the safety aspect, Sgt. Barringer said there also is an environmental impact.

"Endangered species could be making a home out there and pieces of history could be there as well. If they come into contact with a UXO, it could be disastrous," he said. "More importantly though, it's a major concern for the personnel who are out there cataloging these artifacts and protecting the animals."

During a range clearing, EOD personnel follow specific guidelines to ensure their own safety as well. "We begin clearing within a 2,000-foot radius from target center and tag every piece of munition residue," said Sgt. Barringer. "In addition, we also pick up any scraps from old bombs we may find."

To tag the residue, the EOD teams use the Global Position Satellite system to properly mark where all items are located on the range so they can come back to them. "Using the GPS allows us to track our progress out on the range," said Sgt. Barringer. "It also tells us where we've been and where we need to go."

To clear the range, the EOD teams detonate the ordnance using a combination of blasting caps, timed fuses and C-4. The EOD team connects the blasting cap to the time fuse, which then is planted into the C-4. After igniting the time fuse, the spark travels to the blasting cap and detonates the C-4.

To Sgt. Gertiser, being apart of the EOD career field is like a dream come true. "My job is cool because of what I get to do," said Sgt. Gertiser. "This is the dream job of every kid. I get to go out just about every day and blow things up, and I get paid for it. Not too many people can say that about their job."

— Airman 1st Class Matthew Dillier, AFFTC Public Affairs

Staff Sgt. Neil Gertiser, 95th EOD division operations NCOIC, attaches C-4 explosive to detonate a bomb at Edwards AFB, Calif. Detonation is done to ensure range safety. (Photo by Airman 1st Class Matt Dillier)



Mr. Donald Faison (wearing blue) goes up against Mr. Dean Cain (in white) during the second annual National Basketball Association Entertainment League Game at Edwards AFB, Calif., on May 10. (U.S. Air Force photo by Mr. Lewis Mitchell)

Hollywood entertainers play ball at Edwards

Hollywood entertainers traveled to Edwards Air Force Base, Calif., May 10 for the second annual National Basketball Association Entertainment League game.

Mr. Zane Stoddard, NBA director of entertainment marketing, said he was happy he could bring the entertainers out, show base people a good time and support the military.

"Obviously with the situation in Iraq, emotions are running high and there is a lot of appreciation for what the military is doing for us," said Mr. Stoddard. "I said last year the entertainment industry and the NBA are not isolated from what's going on around the world. We appreciate the freedom that we have and the people that maintain that freedom."

Many of the entertainers who came out said they were happy to be putting on a show for the military.

"Right now I think it's funny how America has reacted to the war," said Mr. Dean Cain, host of "Ripley's Believe It or Not" and participant in the game. "All the people protesting are the outspoken minority. As a part of the quiet majority, I support our troops 100 percent. I'm just happy to be out here."

Players for the blue team included Mr. Ashton Kutcher, Mr. Frankie Muniz, Mr. Sean Patrick Thomas, Mr. Donald Faison, Mr. Roger Lodge, Mr. Drew Lachey and Mr. Jonathan Lipnicki. The white team included Bow Wow, Mr. Cain, Mr. Dalvin Degrate, Mr. Danny Masterson, Mr. Wilmer Valderrama, Mr. Trevor Penick, Mr. Sam Jones and Mr. Adam Rodriguez.

During halftime, autographed basketballs were passed out to winning ticket holders. After the game ended, the entertainers signed autographs and posed for pictures.

"It was a great turnout, and we would be happy to come back every year," Mr. Stoddard said.

The entertainers agreed with him, with many saying it was the least they could do.

"Ever since I was a kid, I wanted to be a pilot for the Air Force," said Mr. Valderrama, an actor on Fox's "That 70's Show." "The fact that I get to come here is pretty overwhelming. It is cool to meet the men and women who defend our country. It is a blessing to be here and to know we are in good hands."

— Airman 1st Class Wes Auldridge, AFFTC Public Affairs



Mr. Scott Schroeder, 53rd Wing program analyst at Eglin AFB, Fla., practices skeet shooting. (Courtesy photo)

Eglin man makes world championship team

A 53rd Wing program analyst at Eglin Air Force Base, Fla., is one of three people from the United States who'll be competing in the International Skeet World Championships scheduled for Sept. 10-17 in Nicosia, Cyprus.

Mr. Scott Schroeder earned a spot on the 2003 World Championship Team by shooting his way to first place in International Skeet's United States Spring Selection match at Fort Benning, Ga., recently.

Multiple wins

Mr. Schroeder started shooting as part of the Air Force Shooting Team in 1986. His win at the Spring Selection match makes more than eight times that he has made the U.S. National Team and four times

he's made the World Championship team. He has also competed in more than 12 World Cup Competitions.

Going for the gold

He won an individual Gold Medal at the Atlanta World Cup in 1998, and a country quota spot for the U.S. team for the 2000 Olympics.

In addition, he finished seventh at the World Championships in Finland in 1999 and, along with two other teammates, won a silver medal in the team event at the Japan World Cup.

Additionally, he won the U.S. National Championship in 2000 and was second alternate to the 2000 Olympic team, missing the second Olympic spot by one bird out of 600.

"Everything I have been lucky enough

to accomplish so far in my shooting career can be directly related to my family, the Air Force and support from my commanders," he said.

Future ambitions

Along with his previous successes, he said he hopes to make a bid for the 2004 Olympics.

Two selection matches will determine the U.S. Olympic team. One match will be held this October in Colorado Springs, Colo., and the second will be held in April 2004 at Fort Benning.

He said the combined total of these two matches will determine the top two shooters, and they will be the Olympic team for the summer of 2004.

— *Tech. Sgt. Carole Steele, 53rd Wing Public Affairs*

He just keeps going and going...

Employee celebrates 50 years of service

After 50 years of Air Force service, Mr. Paul Barber shows no signs of slowing down.

"I don't want to quit unless I absolutely have to," said Mr. Barber, an electrical equipment repairman in the maintenance directorate commodities division.

"I am 67 years old, and I'll be 68 in July," he said. "I still feel good, and I guess that's the reason I'm still going."

It runs in the family

According to Mr. Barber, longevity and loyalty run in the family.

"My dad was always that way. He never did want to quit work," he said. "He finally had to because of a bad knee, but I thought he was going to lose his mind the first few months after retirement because he just didn't know what to do with himself."

Born and raised in Tyler, Texas, Mr. Barber came to Oklahoma with his father after graduating from high school. At 17 years old, he already had his eyes on the future.

"I wanted something I could make a career out of and sure enough, I did," he said.

On family influence...

Mr. Barber said his family influenced him to join the Air Force in 1953. "I had a bunch of cousins in different branches of the service, and it just seemed like a pretty good life to me," he said. "Plus, I always liked the Air Force."

His airman career took him all over the United States and to Europe and Asia. Twenty years and three commendation medals after joining the military, the then-master sergeant retired from active duty while stationed here.

A few civil-service assignments later, he returned to Tinker to work in maintenance, where he has been ever since.

Mr. Barber's immediate supervisor, Mr. Joe Hughes, said everybody thinks the world of Mr. Barber.

He's a 'father' figure

"He's the best employee you could ever have," Mr. Hughes said. "Everybody

loves him. He's the father figure of the shop.

However, Mr. Hughes said, Mr. Barber does have at least one little quirk.

He comes prepared

"He's a chow hound," Mr. Hughes said. "His whole locker is full of food. It's like he thinks we're going to get snowed in here for 60 days. When he opens his locker door, everything starts to fall out, it's so full."

Mr. Barber's coworker, Ms. Linda Burrows, said he has a good reason for wanting to keep a few extra munchies around.

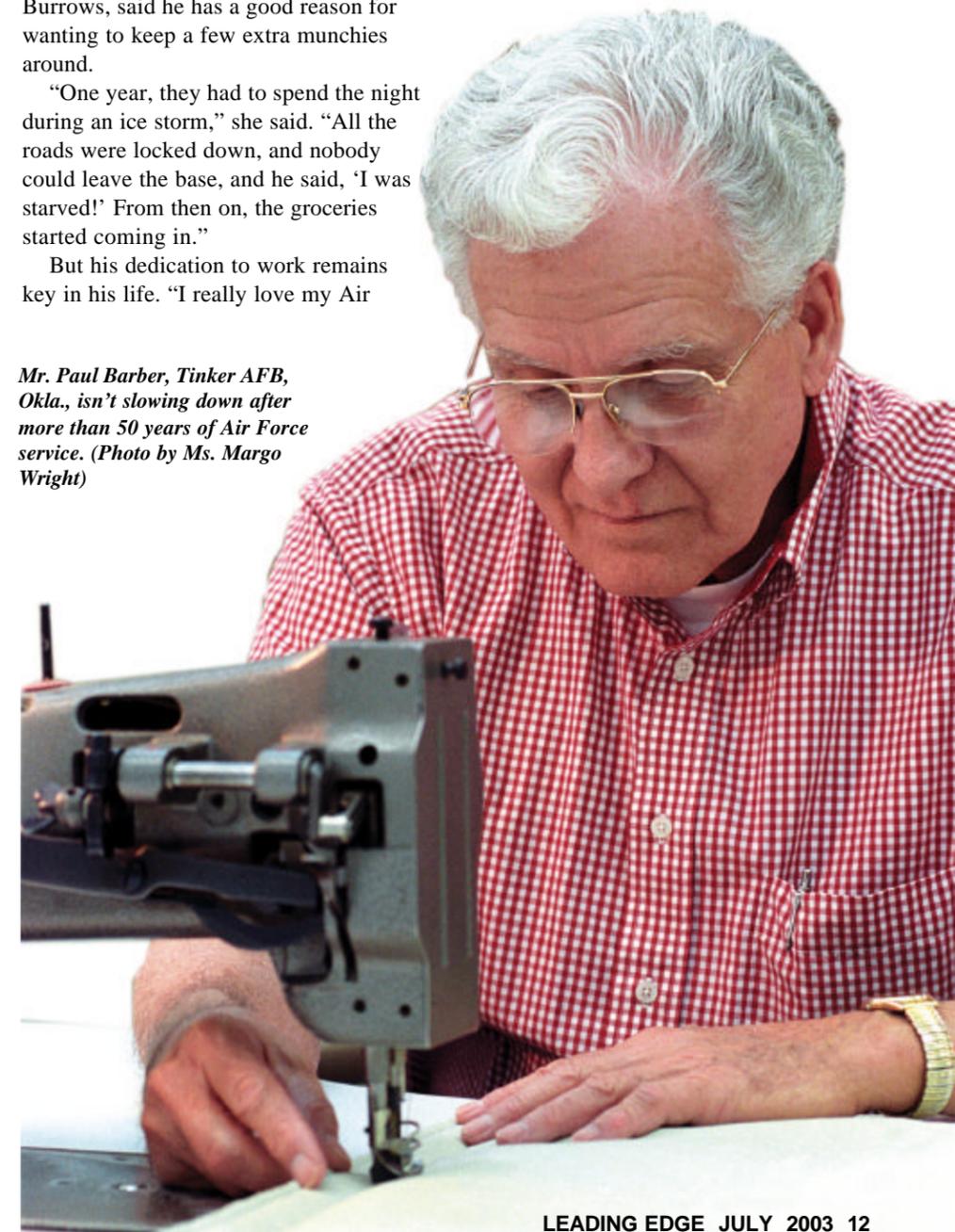
"One year, they had to spend the night during an ice storm," she said. "All the roads were locked down, and nobody could leave the base, and he said, 'I was starved!' From then on, the groceries started coming in."

But his dedication to work remains key in his life. "I really love my Air

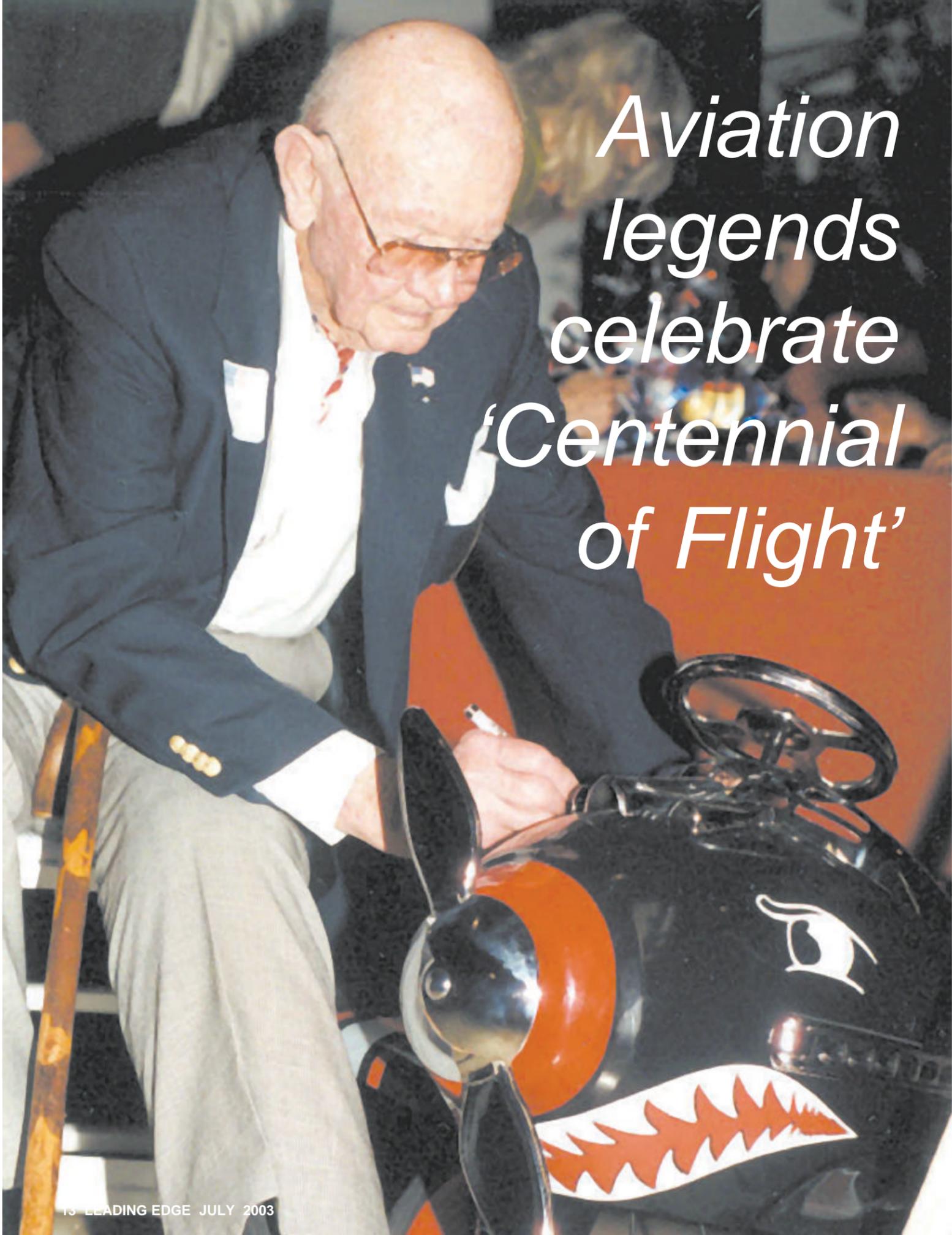
Force career," Mr. Barber said. "The military was the best 20 years of my life. I've always worked around good people. I do now, and I did then.

"If you work around good people, it's worthwhile," he said. "And I have always been blessed by working with good people everywhere I've been. I have no regrets."

— *Ms. Amy Welch, OC-ALC Public Affairs*



Mr. Paul Barber, Tinker AFB, Okla., isn't slowing down after more than 50 years of Air Force service. (Photo by Ms. Margo Wright)



Aviation legends celebrate 'Centennial of Flight'

Some of them are instantly recognizable as historic American figures, while others with names not so well known nevertheless share equal acclaim for their collective contributions to aviation history.

Many of the most celebrated, living aviation legends recently shared the spotlight for perhaps one last time as a group at Brooks City-Base, Texas, by helping their host and the Air Force commemorate our nation's Centennial of Flight.

The San Antonio Academy event provided a forum for these legends to share their thoughts about 100 years of powered flight and their role in its evolution.

Flying Tiger

Foremost among them is former Brooks Field aviator retired Brig. Gen. David Lee "Tex" Hill. At 88, he still possesses the spunk and fearlessness of a triple fighter ace as he maneuvered through the crowd on crutches, the result of a recent injury.

As a member of the American Volunteer Group "Flying Tigers," Gen. Hill used his P-40 Tomahawk as a bird of prey over China as he downed 12 and a quarter Japanese fighters.

After the group disbanded in 1942, he flew the P-51 into history as the first Mustang pilot to shoot down a Japanese zero.

He was credited with a total of six kills as the pilot-commander of the 23rd Fighter Group. In 1946, he made history again when he became the youngest man ever promoted to brigadier general in Air National Guard history.

He later formed the 8707th Pilot Training Wing at Brooks in 1952.

"I would say that manned space flight was the most significant aviation achievement, although so many other things happened in 100 years starting with the Wright Brothers," he said.

The right stuff

His World War II success as a double fighter ace in the European Theater would have been enough to secure retired Brig.

Former Brooks Field aviator Brig. Gen. (Ret.) David Lee "Tex" Hill signs autographs at a recent San Antonio Academy event celebrating the Centennial of Flight. Gen. Hill was a member of the American Volunteer Group "Flying Tigers."

Gen. Chuck Yeager's place in Air Force history. However, it was his contributions to America's space program that he considers among his most significant work in the history of powered flight.

As America's pioneer supersonic test pilot, Gen. Yeager made history on Oct. 14, 1947, when he became the first person to break the sound barrier while flying the Bell X-1, our nation's first research rocket plane. Later as commander of the Air Force Aerospace Research Pilots School, he helped train pilots for the space program and supervised the development of the space simulator.

In 1976, Gen. Yeager made history yet again as the only American to receive the Peacetime Congressional Medal of Honor. Last year, at age 79, he proved he still had "The Right Stuff" when he broke the sound barrier for one last time.

Doolittle's co-pilot

Circumstances cast retired Lt. Col. Richard Cole into the role of a lifetime as co-pilot to Jimmy Doolittle during the historic 1942 raid over Tokyo in which 15 B-25 Mitchell bombers took off from USS Hornet.

"I was lucky to be his co-pilot," Col. Cole said, referring to the visionary Doolittle who had masterminded the daring raid in which for the first time bombers were launched from an aircraft carrier.

"He (Doolittle) was smart, fearless and calculating. We (Doolittle's aircraft) dropped four incendiary bombs.

"Then we flew off to China where we were supposed to land, but heavy weather forced us to bail out," he continued. "Chinese guerrillas rescued us about 80 miles inland," he recalls.

Col. Cole, who was born in the Wright Brothers' hometown of Dayton, Ohio, considers his participation in the Doolittle Raid the highlight of his career, which historians consider a significant chapter in aviation history.

A jet age pioneer

"I shot down the last enemy plane of the war over North Korea on July 27, 1953. It was an IL-12 (C-46)," said Korean War double ace retired Col. Ralph Parr.

At the time, Col. Parr was piloting an F-86 for the 49th Fighter Bomber Wing's

335th Fighter Interceptor Squadron. Previously, he had experienced combat during World War II flying P-38s and later as a Korean War F-80 fighter pilot.

As a jet age pioneer, Col. Parr admits that the F-86 was far superior to the F-80.

However, it was American pilots' superior training that made the difference in the air war over Korea against Russian-made MIGs.

While he shot down 10 enemy planes, Col. Parr doesn't consider it his greatest achievement. What he is most proud of is his contribution to the development of air power. "I helped develop air-to-air tactics for the U.S. Air Force. Because of this, Air Force pilots shot down a lot of planes," he said.

Col. Parr also flew F-4s in Vietnam. He is the only person in Air Force history to have been awarded both the Distinguished Flying Cross and Distinguished Service Cross.

His contributions to Air Force history are depicted in a Hangar 9 exhibit that features an Air Force 50th anniversary poster from the Air Force Art Collection series titled "MIG Alley." It depicts America's Korean War aces at Kimpo Field — Capt. Lonnie Moore and Col. Vermont Garrison, James Johnson, Parr and Maj. James Jabara.

"Except for me, everybody else in the picture was killed," Col. Parr said.

A former POW

One of the longest held prisoners of war remembers the sacrifices American aviators made during the Vietnam War. retired Brig. Gen. Kenneth Fleenor was shot down over North Vietnam in 1967.

He ended up in the infamous "Hanoi Hilton" where he remembers communicating through a wall with a future U.S. Sen. John McCain. "I talked to him using a tap code, a covert communication system that we devised," he said.

The code provided useful, morale-boosting information in what Gen. Fleenor considers one of the most significant events in aviation history.

"We found out about the first moon landing," Gen. Fleenor said, recalling how a fellow prisoner found out about it from an interrogator.

— Mr. Rudy Purificato, 311th HSW

Robins woman wins Air Force Spouse of Year

When her phone recently rang on a routine afternoon, Mrs. Tammie Bocook was a little surprised at what she heard — “Please hold for Gen. Wetekam.”

In seconds, Maj. Gen. Donald Wetekam, Warner Robins Air Logistics Center commander at Robins AFB, Ga., was congratulating the wife of 78th Mission Support Squadron’s Master Sgt. Ray Bocook on being named winner of the 2003 Joan Orr Air Force Spouse of the Year.

The winner of the Robins and Air Force Materiel Command Connie Yates Spouse of the Year, she has immersed herself in Air Force life, a partner to her husband and a helping hand to many.

“I have served because I care about people,” she said. “I always started out to make an impact on at least one person before we left any assignment.”

Instead, she has made an impact on hundreds.

“I think for us, the Air Force is part of our family,” she said. “When I’m working side by side with my husband, I understand exactly what’s going on.”

Her husband has observed that involved spouses “spell the difference between success and failure.”

“You can hit higher levels and reach greater goals if your spouse is willing to be part of the Air Force team,” Sgt. Bocook said. “I notice where spouses are really behind the member and where spouses are involved, the member excels.”

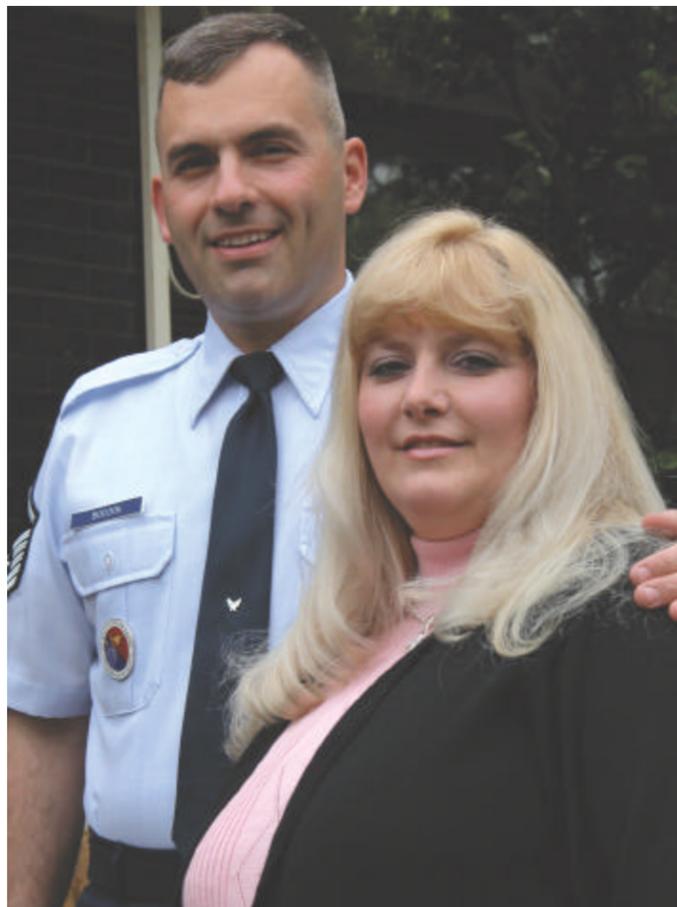
“Tammie has been involved in the Air Force since our marriage more than 16 years ago,” he said. “She likes to be active. She will give you the shirt off her back, helping anyone who needs it. She is a very giving person.”

“Tammie always says ‘okay, I’ll help you.’ Numerous times when I’m working late, she brings me dinner at work. For her, no job is too small, and no job is too big,” Sgt. Bocook said.

She manages to keep a heavy schedule of service while raising a family and working part time. Ms. Bocook teaches preschool three hours three mornings a week at Central Baptist Church in Warner Robins. The Bocooks have three children — Courtney, 16, Steven, 14, and Micah, 6.

Her husband is flight chief of Robins’ Airmen’s Leadership School, where his wife is a familiar presence. Among her long list of activities there, she organized the school’s visit by Chief Master Sergeant of the Air Force Gerald Murray, while acting as hostess to the chief’s staff, the students and local media.

She also worked closely with the NCO Academy commandant to prepare for the chief’s induction ceremony. She even volunteered to watch children for visiting spouses to attend the ceremony. In all, she spent more than 560 hours as a volunteer staff



Mrs. Tammie Bocook stands with her husband of more than 16 years, Master Sgt. Ray Bocook, Robins AFB, Ga. She was recently named the 2003 Joan Orr Air Force Spouse of the Year. (Photo by Ms. Sue Sapp, WR-ALC)

member for the academy, performing a variety of duties — answering phones, working as information manager and personnel specialist when the school’s manning was low, helping with resource management and budget planning by conducting research to find competitive sourcing “best prices,” helping to order supplies and equipment needed for offices and classroom and filing paperwork.

Car wash, First Sergeant’s Association, Robins Summer Base, Base Chapel Harvest Festival, a local school’s fall festival, a military ministry to help members transition to the community, preparing holiday gift bags for Georgia Children’s Home are just a few examples in a litany of services covering two typewritten pages. She is also active in the family’s church.

In the essay that earned her Spouse of the Year, Sgt. Bocook said his wife reminded him of the biblical character Ruth because Ruth said, “Wherever you go, I will go, and wherever you lodge, I will lodge. I will make your people my people and your God, my God.”

“My wife decided to travel from base to base around the world, make the Air Force people her people and serve the Lord with all her heart,” he said. “Her veins flow with blue blood, and she informs her employers that the Air Force comes first.”

— Ms. Chris Zdrakas, 78th ABW Public Affairs

Eglin major receives Bronze Star for combat heroics

EGLIN AIR FORCE BASE, Fla. — Maj. Gen. Robert Chedister, Air Armament Center commander, recently presented the Bronze Star to Maj. Jeffrey Thorburn, 96th Services Squadron commander.

The Bronze Star is awarded for heroic or meritorious achievement of service, not involving aerial flight, in connection with military operations against an opposing armed force.

Maj. Thorburn was assigned to Ahmed Al Jaber Air Base, Kuwait, as the squadron commander. He and his staff of 12 provided security for approximately 2,000 people there.

During his deployment, he forward-deployed to Bagram Air Base to solve serious problems with air base defense.

While at Bagram, they cleared 1,200 mines within their perimeter. The munitions were believed to have been left over from the Russians, Taliban and Northern Alliance. There were mines all over the airfield.

One evening while under attack from people believed to be Taliban, he put together a team that followed Alliance guides through the mine field and destroyed a mortar launcher.

— Reported by AAC Public Affairs



AFMC installations win top environmental awards

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Two Air Force Materiel Command installations are winners of Secretary of Defense Environmental Awards for 2002.

Representatives from Hill Air Force Base, Utah, and Tinker AFB, Okla., received their awards during a Pentagon ceremony May 7.

Tinker won the Environmental Quality Award for an industrial installation, recognizing base efforts to protect human health and the environment by achieving full and sustained compliance with all applicable environmental requirements.

Hill took top honors for the Environmental Restoration Award. The award is given to installations demonstrating exceptional efforts to protect human health and the environment by cleaning up identified sites, in a timely, cost-efficient and responsive manner.

— Reported by AFMC Public Affairs

AFRL scientist wins DOD Harold Brown award

HANSCOM AFB, Mass. — Dr. Edmond Dewan of the Air Force Research Laboratory’s Space-Based Infrared Technology Branch has won the Defense Department’s 2002 Harold Brown Award.

Dr. Dewan won the award for a theoretical modeling achievement that plays a key role in predicting the location and severity of optical turbulence — an

atmospheric phenomena that makes stars appear to twinkle. This naturally occurring condition can also disrupt the transmission of a laser beam, a critical concern for the future Air Force Airborne Laser theater missile defense system reliant on lasers to shoot down enemy missiles.

Dr. Dewan has developed a model that helps forecasters know when and where optical turbulence is strong enough to “break-up” an ABL beam before hitting its target. Such predictions may enable a more effective tactical positioning of an ABL relative to its target, thus avoiding as much turbulence as possible.

Called the “Dewan Model,” this breakthrough technology will enable other tactical high-energy applications adversely affected by atmospheric disturbance.

— Reported by AFRL Public Affairs

USAF Museum education chief receives honor

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Ms. Judith Wehn, U.S. Air Force Museum’s Education Division chief, was recently inducted into the Civil Air Patrol’s National Congress Crown Circle for Aerospace Education Leadership. This is the highest award presented by the National Congress. Ms. Wehn becomes one of 116 people worldwide to be so honored, a group that includes famous test pilot Chuck Yeager.

She has taken the museum from 137 education programs serving 8,300 visitors in 1986 to administering nearly 1,200 programs reaching more than 82,000 stu-

dents, teachers and visitors in 2002.

Ms. Wehn oversees a comprehensive and growing program that encompasses various workshops, hands-on activities, tours and events. Among her accomplishments are: creating a partnership between the museum and the National Education Association’s “Read Across America” program; Project SOAR, a collaboration among the museum, the Air Force Museum Foundation and the University of Dayton offering intensive workshops; and Family Day, offering intergenerational learning experiences to more than 35,000 students and family members.

— Reported by USAF Museum Public Affairs

AFRL-Rome scientist receives DOD award

ROME, N.Y. — Dr. Helen Rico, a senior computer scientist at the Air Force Research Laboratory Information Directorate, has been named recipient of a 2003 Defense Department Value Engineering Award.

She was cited for her efforts to reduce costs associated with research and development program documentation, automated data processing equipment inventories, and research and development software license and hardware acquisition. Her proposals to the Air Force Innovative Development through Employee Awareness program in these areas resulted in savings of more than \$5 million during a three-year period.

— Reported by AFRL Public Affairs